

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/588,667
Source: IFWP
Date Processed by STIC: 08/14/2006

ENTERED



IFWP

RAW SEQUENCE LISTING

DATE: 08/14/2006

PATENT APPLICATION: US/10/588,667

TIME: 14:06:32

Input Set : A:\X16438 rev'd 10-July-2006 (US).ST25.txt

Output Set: N:\CRF4\08142006\J588667.raw

3 <110> APPLICANT: Heiman, Mark Louis

4 Hertel, JeAnne L

6 <120> TITLE OF INVENTION: USES OF MELANOCORTIN-4 RECEPTOR (MC4R) AGONIST

PEPTIDES

7 ADMINISTERED BY CONTINUOUS INFUSION

9 <130> FILE REFERENCE: X16438

C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/588,667

C--> 12 <141> CURRENT FILING DATE: 2006-08-04

14 <150> PRIOR APPLICATION NUMBER: US 60/479740

15 <151> PRIOR FILING DATE: 2003-06-19

17 <150> PRIOR APPLICATION NUMBER: US 60/570737

18 <151> PRIOR FILING DATE: 2004-05-13

20 <160> NUMBER OF SEQ ID NOS: 201

22 <170> SOFTWARE: PatentIn version 3.3

24 <210> SEQ ID NO: 1

25 <211> LENGTH: 6

26 <212> TYPE: PRT

27 <213> ORGANISM: Artificial

29 <220> FEATURE:

30 <223> OTHER INFORMATION: Synthetic construct

33 <220> FEATURE:

34 <221> NAME/KEY: DISULFID

35 <222> LOCATION: (1)..(6)

37 <220> FEATURE:

38 <221> NAME/KEY: MOD_RES

39 <222> LOCATION: (1)..(1)

40 <223> OTHER INFORMATION: ACETYLTATION

42 <220> FEATURE:

43 <221> NAME/KEY: MOD_RES

44 <222> LOCATION: (3)..(3)

45 <223> OTHER INFORMATION: D form

47 <220> FEATURE:

48 <221> NAME/KEY: MOD_RES

49 <222> LOCATION: (6)..(6)

50 <223> OTHER INFORMATION: AMIDATION

52 <400> SEQUENCE: 1

54 Cys His Phe Arg Trp Cys

55 1 5

58 <210> SEQ ID NO: 2

59 <211> LENGTH: 9

60 <212> TYPE: PRT

61 <213> ORGANISM: Artificial

63 <220> FEATURE:

64 <223> OTHER INFORMATION: Synthetic construct

CPg-6,7

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67 <220> FEATURE:
68 <221> NAME/KEY: MISC_FEATURE
69 <222> LOCATION: (1)..(1)
70 <223> OTHER INFORMATION: Xaa = Cysteic acid
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73 <221> NAME/KEY: MOD_RES
74 <222> LOCATION: (1)..(1)
75 <223> OTHER INFORMATION: ACETYLTATION
77 <220> FEATURE:
78 <221> NAME/KEY: DISULFID
79 <222> LOCATION: (3)..(9)
81 <220> FEATURE:
82 <221> NAME/KEY: MOD_RES
83 <222> LOCATION: (6)..(6)
84 <223> OTHER INFORMATION: D form
86 <220> FEATURE:
87 <221> NAME/KEY: MOD_RES
88 <222> LOCATION: (9)..(9)
89 <223> OTHER INFORMATION: AMIDATION
91 <400> SEQUENCE: 2
W--> 93 Xaa Arg Cys Ala His Phe Arg Trp Cys
94 1 5
97 <210> SEQ ID NO: 3
98 <211> LENGTH: 9
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108 <222> LOCATION: (1)..(1)
109 <223> OTHER INFORMATION: ACETYLTATION
111 <220> FEATURE:
112 <221> NAME/KEY: DISULFID
113 <222> LOCATION: (3)..(9)
115 <220> FEATURE:
116 <221> NAME/KEY: MOD_RES
117 <222> LOCATION: (6)..(6)
118 <223> OTHER INFORMATION: D form
120 <220> FEATURE:
121 <221> NAME/KEY: MOD_RES
122 <222> LOCATION: (9)..(9)
123 <223> OTHER INFORMATION: AMIDATION
125 <400> SEQUENCE: 3
127 Tyr Arg Cys Ala His Phe Arg Trp Cys
128 1 5
131 <210> SEQ ID NO: 4
132 <211> LENGTH: 9
133 <212> TYPE: PRT

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134 <213> ORGANISM: Artificial
136 <220> FEATURE:
137 <223> OTHER INFORMATION: Synthetic construct
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142 <222> LOCATION: (1)..(1)
143 <223> OTHER INFORMATION: ACETYLTATION
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149 <220> FEATURE:
150 <221> NAME/KEY: MOD_RES
151 <222> LOCATION: (6)..(6)
152 <223> OTHER INFORMATION: D form
154 <220> FEATURE:
155 <221> NAME/KEY: MOD_RES
156 <222> LOCATION: (9)..(9)
157 <223> OTHER INFORMATION: AMIDATION
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162 1 5
165 <210> SEQ ID NO: 5
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167 <212> TYPE: PRT
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176 <222> LOCATION: (1)..(1)
177 <223> OTHER INFORMATION: ACETYLTATION
179 <220> FEATURE:
180 <221> NAME/KEY: DISULFID
181 <222> LOCATION: (3)..(9)
183 <220> FEATURE:
184 <221> NAME/KEY: MOD_RES
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186 <223> OTHER INFORMATION: D form
188 <220> FEATURE:
189 <221> NAME/KEY: MOD_RES
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191 <223> OTHER INFORMATION: AMIDATION
193 <400> SEQUENCE: 5
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196 1 5
199 <210> SEQ ID NO: 6
200 <211> LENGTH: 7
201 <212> TYPE: PRT
202 <213> ORGANISM: Artificial

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204 <220> FEATURE:
 205 <223> OTHER INFORMATION: Synthetic construct
 208 <220> FEATURE:
 209 <221> NAME/KEY: MOD_RES
 210 <222> LOCATION: (1)..(1)
 211 <223> OTHER INFORMATION: ACETYLTATION
 213 <220> FEATURE:
 214 <221> NAME/KEY: DISULFID
 215 <222> LOCATION: (1)..(7)
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 218 <221> NAME/KEY: MOD_RES
 219 <222> LOCATION: (4)..(4)
 220 <223> OTHER INFORMATION: D form
 222 <220> FEATURE:
 223 <221> NAME/KEY: MOD_RES
 224 <222> LOCATION: (7)..(7)
 225 <223> OTHER INFORMATION: AMIDATION
 227 <400> SEQUENCE: 6
 229 Cys Asp His Phe Arg Trp Cys
 230 1 5
 233 <210> SEQ ID NO: 7
 234 <211> LENGTH: 9
 235 <212> TYPE: PRT
 236 <213> ORGANISM: Artificial
 238 <220> FEATURE:
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 243 <221> NAME/KEY: MOD_RES
 244 <222> LOCATION: (1)..(1)
 245 <223> OTHER INFORMATION: ACETYLTATION
 247 <220> FEATURE:
 248 <221> NAME/KEY: DISULFID
 249 <222> LOCATION: (3)..(9)
 251 <220> FEATURE:
 252 <221> NAME/KEY: MOD_RES
 253 <222> LOCATION: (6)..(6)
 254 <223> OTHER INFORMATION: D form
 256 <220> FEATURE:
 257 <221> NAME/KEY: MOD_RES
 258 <222> LOCATION: (9)..(9)
 259 <223> OTHER INFORMATION: AMIDATION
 261 <400> SEQUENCE: 7
 263 Tyr Arg Cys Asp His Phe Arg Trp Cys
 264 1 5
 267 <210> SEQ ID NO: 8
 268 <211> LENGTH: 7
 269 <212> TYPE: PRT
 270 <213> ORGANISM: Artificial
 272 <220> FEATURE:

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Input Set : A:\X16438 rev'd 10-July-2006 (US).ST25.txt

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273 <223> OTHER INFORMATION: Synthetic construct
 276 <220> FEATURE:
 277 <221> NAME/KEY: MOD_RES
 278 <222> LOCATION: (1)..(1)
 279 <223> OTHER INFORMATION: ACETYLATION
 281 <220> FEATURE:
 282 <221> NAME/KEY: DISULFID
 283 <222> LOCATION: (1)..(7)
 285 <220> FEATURE:
 286 <221> NAME/KEY: MOD_RES
 287 <222> LOCATION: (4)..(4)
 288 <223> OTHER INFORMATION: D form
 290 <220> FEATURE:
 291 <221> NAME/KEY: MOD_RES
 292 <222> LOCATION: (7)..(7)
 293 <223> OTHER INFORMATION: AMIDATION
 295 <400> SEQUENCE: 8
 297 Cys Gln His Phe Arg Trp Cys
 298 1 5
 301 <210> SEQ ID NO: 9
 302 <211> LENGTH: 9
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 311 <221> NAME/KEY: MOD_RES
 312 <222> LOCATION: (1)..(1)
 313 <223> OTHER INFORMATION: ACETYLATION
 315 <220> FEATURE:
 316 <221> NAME/KEY: DISULFID
 317 <222> LOCATION: (3)..(9)
 319 <220> FEATURE:
 320 <221> NAME/KEY: MOD_RES
 321 <222> LOCATION: (6)..(6)
 322 <223> OTHER INFORMATION: D form
 324 <400> SEQUENCE: 9
 326 Tyr Arg Cys Gln His Phe Arg Trp Cys
 327 1 5
 330 <210> SEQ ID NO: 10
 331 <211> LENGTH: 9
 332 <212> TYPE: PRT
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 335 <220> FEATURE:
 336 <223> OTHER INFORMATION: Synthetic construct
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 340 <221> NAME/KEY: MOD_RES
 341 <222> LOCATION: (1)..(1)
 342 <223> OTHER INFORMATION: ACETYLATION

RAW SEQUENCE LISTING ERROR SUMMARY
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Input Set : A:\X16438 rev'd 10-July-2006 (US).ST25.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; Xaa Pos. 1
Seq#:26; Xaa Pos. 3
Seq#:27; Xaa Pos. 3
Seq#:28; Xaa Pos. 4
Seq#:54; Xaa Pos. 1
Seq#:55; Xaa Pos. 1
Seq#:56; Xaa Pos. 1
Seq#:59; Xaa Pos. 1
Seq#:60; Xaa Pos. 1
Seq#:61; Xaa Pos. 1
Seq#:62; Xaa Pos. 1
Seq#:78; Xaa Pos. 9
Seq#:116; Xaa Pos. 10
Seq#:120; Xaa Pos. 11
Seq#:122; Xaa Pos. 11
Seq#:124; Xaa Pos. 2
Seq#:125; Xaa Pos. 2
Seq#:126; Xaa Pos. 2
Seq#:127; Xaa Pos. 2
Seq#:132; Xaa Pos. 1
Seq#:133; Xaa Pos. 1
Seq#:134; Xaa Pos. 1
Seq#:135; Xaa Pos. 1
Seq#:136; Xaa Pos. 1
Seq#:137; Xaa Pos. 1
Seq#:138; Xaa Pos. 1
Seq#:139; Xaa Pos. 1
Seq#:140; Xaa Pos. 1
Seq#:141; Xaa Pos. 1
Seq#:142; Xaa Pos. 1
Seq#:143; Xaa Pos. 1
Seq#:144; Xaa Pos. 1
Seq#:145; Xaa Pos. 1
Seq#:146; Xaa Pos. 1
Seq#:147; Xaa Pos. 1
Seq#:148; Xaa Pos. 1
Seq#:149; Xaa Pos. 1
Seq#:150; Xaa Pos. 1
Seq#:151; Xaa Pos. 1
Seq#:152; Xaa Pos. 1
Seq#:153; Xaa Pos. 2
Seq#:154; Xaa Pos. 2
Seq#:155; Xaa Pos. 2
Seq#:156; Xaa Pos. 2

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Input Set : A:\X16438 rev'd 10-July-2006 (US).ST25.txt
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Seq#:157; Xaa Pos. 2
Seq#:158; Xaa Pos. 2
Seq#:159; Xaa Pos. 2
Seq#:160; Xaa Pos. 1,2
Seq#:161; Xaa Pos. 2
Seq#:162; Xaa Pos. 3
Seq#:163; Xaa Pos. 3

Invalid <213> Response:

**Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.**

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27
Seq#:28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51
Seq#:52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75
Seq#:76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99
Seq#:100,101,102,103,104,105,106,107,108,109,110,111,112,113,114,115,116,117
Seq#:118,119,120,121,122,123,124,125,126,127,128,129,130,131,132,133,134,135
Seq#:136,137,138,139,140,141,142,143,144,145,146,147,148,149,150,151,152,153
Seq#:154,155,156,157,158,159,160,161,162,163,164,165,166,167,168,169,170,171
Seq#:172,173,174,175,176,177,178,179,180,181,182,183,184,185,186,187,188,189
Seq#:190,191,192,193,194,195,196,197,198,199,200,201

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Input Set : A:\X16438 rev'd 10-July-2006 (US).ST25.txt

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L:11 M:270 C: Current Application Number differs, Replaced Current Application Number

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:93 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0

L:904 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0

L:948 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0

L:987 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0

L:1871 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54 after pos.:0

L:1910 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:0

L:1954 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:0

L:2061 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59 after pos.:0

L:2100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:0

L:2139 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:0

L:2178 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:0

L:2692 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:78 after pos.:0

L:4134 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:116 after pos.:0

L:4270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:120 after pos.:0

L:4338 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122 after pos.:0

L:4411 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:124 after pos.:0

L:4455 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:125 after pos.:0

L:4494 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:126 after pos.:0

L:4533 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:127 after pos.:0

L:4698 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:132 after pos.:0

L:4727 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:133 after pos.:0

L:4761 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134 after pos.:0

L:4795 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:135 after pos.:0

L:4829 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:136 after pos.:0

L:4868 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:137 after pos.:0

L:4902 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138 after pos.:0

L:4941 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139 after pos.:0

L:4980 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:140 after pos.:0

L:5019 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:141 after pos.:0

L:5058 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:142 after pos.:0

L:5097 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:143 after pos.:0

L:5136 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:144 after pos.:0

L:5175 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:145 after pos.:0

L:5214 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:146 after pos.:0

L:5253 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:147 after pos.:0

L:5292 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:148 after pos.:0

L:5331 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:149 after pos.:0

L:5370 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:150 after pos.:0

L:5409 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:151 after pos.:0

L:5448 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:152 after pos.:0

L:5482 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:153 after pos.:0

L:5521 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:154 after pos.:0

L:5550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:155 after pos.:0

L:5589 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:0

L:5628 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:157 after pos.:0

L:5667 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:158 after pos.:0

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L:5701 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:0
L:5745 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:160 after pos.:0
L:5784 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:161 after pos.:0
L:5818 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:162 after pos.:0